

Serial No. 09/660,370

- 13 -

Art Unit: 2134

REMARKS

Reconsideration and further examination is respectfully requested.

Rejections under 35 U.S.C. §102

Claims 1, 3-12, 18-36 and 46-65 were rejected under 35 U.S.C. §102(b) as being anticipated by Ballardie (Network Working Group, University College of London, May 1996).

Ballardie:

Ballardie purports to provide a scalable solution to the multi-cast key distribution problems in the art, in particular using a Core Based Tree (CBT) multicast protocol. Ballardie describes, at page 2, 'how the CBT multicast protocol can provide for the secure joining of a CBT group tree.' Ballardie describes:

"... A shared multicast delivery tree is built around several so-called core routers. A group receiver's local multicast router is required to explicitly join the corresponding delivery tree after receiving an IGMP [8] group membership report over a directly connected interface. A CBT join message is targeted at one of the group's core routers...." (Ballardie, section 2, paragraph 2).

At pages 9-11, Ballardie describes the process of joining a multicast group in more detail:

"In the diagram, host h wishes to join multicast group G. Its local multicast router (router A) has not yet joined the CBT tree for the group G.... Immediately subsequent to a multicast application starting upon host h, host h immediately sends an IGMP group membership report, addressed to the group. In response to receiving the IGMP report, the local designated router (router A) authenticates the host's enclosed token. If successful, router A formulates a CBT join-request, whose target is core C (the primary core). Router A includes its own token in the join, as well as the signed token received from host h. *The join is digitally signed by router A.*"

Serial No. 09/660,370

- 14 -

Art Unit: 2134

In order to support a rejection under 35 U.S.C. §102(b), *every* limitation in the claims should be shown or suggested by the references. Applicants submit that the Ballardie reference fails to meet this burden with regard to Claim 1, as the join message, that is forwarded to the primary core router C, is "digitally signed by router A" neither shows nor suggests the limitation of "the rendezvous point device receives the encoded join request and authenticates the encoded join message *using the authentication key associated with the host device...*" Ballardie is fundamentally different than the claimed invention, as join request sent by the local designated router is digitally signed using the router authentication information, *not* the "authentication key associated with the host device..." Accordingly, for at least the reason that Ballardie fails to describe or suggest all the limitations of claim 1, it is respectfully requested that the rejection be withdrawn.

Dependent claims 3 and 5-12 serve to add further patentable limitations to claim 1 and are therefore allowable for at least the same reasons claim 1.

Independent claims 20, 22, 29 and 32:

Each of the independent claims 20, 22, 29 and 32 have been amended to include a limitation of or similar to "...forwarding of the join message to a rendezvous point, *to enable authentication of the join message at the rendezvous point using the authentication key associated with the host device...*" Accordingly, for at least the reason that Ballardie fails to disclose the core router authenticating the join using the host authentication key, claims 20, 22 and 29 are patentably distinct over Ballardie. In addition, their respective dependent claims 21,

Serial No. 09/660,370

- 15 -

Art Unit: 2134

23-28 and 30-31 and 33-36 are patentable for at least the same reasons as their parent independent claims.

Independent claims 48, 53, 58 and 65:

Independent claims 48, 53, 58 and 65 have each been amended to include a limitation of "...authenticating the encoded join request *using the host device authentication key...*" As described above, Ballardie explicitly states that the join is digitally signed by the designated router. Accordingly, for reasons similar to those put forth with regard to claim 1, claims 48, 53, 58 and 65 are patentably distinct over Ballardie. In addition, their respective dependent claims are patentable for at least the same reasons as their parent independent claims.

Serial No. 09/660,370

- 16 -

Art Unit: 2134

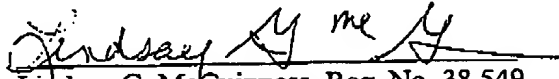
Conclusion:

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone the undersigned, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

11/28/05
Date


Lindsay G. McGuinness, Reg. No. 38,549
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
125 Nagog Park
Acton, MA 01720
(978) 264-6664

Docket No. 120-244
Dd: 11/26/2005